#### Atlantic Flyway Review

# ATLANTIC FLYWAY REVIEW (Region I) Edited by: DAVID R. PETERSEN

Writing a synthesis of the fall migration based on the efforts of a number of dedicated banders and the data that they compile is a most challenging operation. Without the meticulous comments of the workers involved, it would be impossible. A word of thanks, then, is in order for all those contributors who got their station reports into my hands by the necessary deadline and in such an orderly fashion.

In reading over past Atlantic Flyway Reviews, the manner of summary varies as much as the seasons themselves. To devise a unique summary technique would involve far more space than our journal would permit, therefore I shall adhere to a rather traditional format.

#### Statistical Summary - Region I

In considering the figures below, we should be aware of some of the variables represented before we attempt any broad generalizations. Perhaps the most difficult variable to assess is the existing relationship between total net hours and birds per net hour x 100. The problem is that not all banders run nets during the same period of the day. For example, two stations may have identical total net hours however one station runs nets from 0800 to 1100 hours and from 1500 to 1800 hours while the other runs nets from 0500 to 1000 hours and from 1700 to 1900 hours. Intuitively, that station which runs its nets earlier in the morning and later in the afternoon is likely to produce a greater total of individuals banded due to increased bird movement during those time periods.

A second problem in considering the statistical information at face value is that for those stations not running on a daily basis, their total individuals banded figure may represent the artifact of netting on the day of a great migrational land-fall or of having missed such a big day.

Obviously, both of these variables are well known, yet sometimes we tend to jump to conclusions concerning the status of various species as reflected by our banding data. These points merely highlight the need for continued long-term banding under virtually identical times and periods.

(We should have more "Powdermills and Manomets", stations where they strive for uniformity: same net locations, hours, type, size etc. We run into the same statistical problems in Project Amfo, as Mr. Petersen has pointed out here. There are statistical methods by which these biases can be worked out of the data but wouldn't it be much wiser to remove as many variables at the station level as possible, before such unreliable data finds itself a part of the data we have to analyze? Editor)

Station and Leader Mount Desert, Maine Mrs. R. Patterson	1970: No. Ne 1969:	ts Net Hrs. 440 890	Indiv. 485 532	Spec. 51 54	BPNH x100 110 59
East Chop, Mass.	1970: ?	743.5	238	34	32
Miss Grace C. Meleney	1969: 5	461.5	240	28	52
Manomet Bird Observatory	1970:35-45	40,575.5	7127	86	17.5
Mrs. Kathleen Anderson	1969:	31,178.0	4828	104	15.0
Nantucket, Mass.	1970: 1-5	660	913	63	138
Mrs. Edith Andrews	1969: 1-5	773	1211	56	156
Block Island, R.I. Mrs. Elise Lapham	1970: 8 1969:	2578 2412	4750 3486	90 96	

## Station Report - Region I:

Mention has already been made of some of the problems involved in comparing the statistical data from each of the various banding stations in Region I. It should be noted at this point that similar artifacts can be noted at individual banding stations due to varying circumstances. For example, at the Manomet Bird Observatory a sharp increase in the number of banded Robins and Orioles was believed to be due largely to the running of some new nets around a huge Viburnum thicket, the berries of which attracted large numbers of these birds during the early fall.

Before considering each station seperately, mention should be made of several species which generally were unique in one way or another. The fall of 1969 saw massive incursion of both Black-capped and Boreal Chickadees throughout New England. This was reflected by over 1000 Black-caps and nearly 50 Boreals banded at the Manomet Bird Observatory alone. This fall (1970), no Boreals and only 199 Black-capped Chickadees were banded. Here, a valuable dimension of banding is apparent in that visual observations of such a common species as the chickadee might not give any indication of the magnitude of the dispersal movements of such a common bird.

Atlantic Flyway Review

Red-breasted Nuthatches were equally conspicuous by their absence or low numbers at all stations. This of course, is another species traditionally subject to great variation in its fall and winter movements.

The Swainson's Thrush was another of the species whose numbers were generally considerably up from last season. Their increase is very difficult to explain. To assume poor breeding productivity last year is probably a poor guess. Rather, it may be that like many species a high banding yield is largely dependent on adverse local conditions during the peak passage period of that species. Thus, for the Swainson's Thrush for example, perhaps heavy flights may have been in progress when a stiff northwest wind suddenly precipitated numbers of them all along the New England coast where banders might assume that the species had a particularly good breeding season in the boreal forests of Canada. In 1969, much of the thrush migration may have taken place on nights when conditions allowed most of the flight to pass New England without being forced into the banders' coastal nets. Hence, the species had a poor year! No doubt, the complexities of migration and population fluctuations are a good deal deeper than this. The point to be emphasized is that despite all its values, great care must be exercised in drawing either positive or negative conclusions from banding data.

In considering each individual report, the comments are those of the station leader unless otherwise indicated. The exact location of each station is not included since in each case it is the same as that described in EBBA NEWS 33(1).

## Mount Desert, Maine - Barbara Patterson

The most numerous species was the American Redstart (81). It is interesting to note, recalling that netting was done in the same net lanes at roughly the same time of day, that from 1960 through 1965 the numbers of Redstarts netted per fall migration period did not exceed 21 (net hours averaging 1309), but beginning in 1967 the numbers jumped to 65 in 1440 net hours; in 1968, 48 in 1532 net hours; in 1969, 54 in 890 net hours and 1970, 81 in 440 net hours.

The two best days were August 30 with 52 birds of 18 species in 40 net hours and September 6 with 49 birds in 32 net hours.

AFR editor's note: In addition to the above birds, Mrs. Patterson banded 27 Yellow-bellied Flycatchers, which no doubt reflects the proximity to nesting areas since no other station even approached such a high total. She banded 31 Swainson's Thrushes. All of the station's banding was done between Aug. 26 and Sep. 19 and on September 26.

East Chop (Martha's Vineyard Island), Mass. - Grace C. Meleney

AFR Editor: At East Chop, the Black-capped Chickadee was the most frequently banded species (60) and 26 Palm Warblers reflects that species preference for the coast, much in the manner of the Myrtle Warbler. Miss Meleney reports that her exposed location makes all day banding difficult as a result of generally windy conditions.

### Manomet Bird Observatory, Mass. - Kathleen Anderson

AFR Editor: The 1970 season at Manomet was highlighted by a record high total of both birds banded and net hours run. From August 1- October 31, a total of 7127 birds of 86 species were banded in 40,575.5 net hours. The Carolina Wren, Bobolink and House Finch were all new species for the Observatory.

Two hybrid flickers were banded this season and it is hoped that shortly a paper will be forthcoming on these regular variants at MBO.(See Dr. Short's paper on this subject beginning on page 4 of this issue. Ed.) The presence of 3 Carolina Wrens at Manomet suggests that perhaps the species is staging one of its periodic attempts to extend northward its breeding range fron rhode Island and south-eastern Massachusetts. The Swainson's Thrush figures, as mentioned earlier, are interesting with 65 banded as compared to 7 in 1969. The Gnatcatcher with its long and well documented history at Manomet, reached a peak this year with 26 banded. Red-eyed Vireos were banded in excellent numbers (137) which is in keeping with Mrs. Lapham's comments on Block Island, R.I. Myrtle Warblers reached a peak of 1203 in September and October, and 111 were banded on October 9. White-throated Sparrows were noted in good numbers (440 in October) and 134 banded on Oct. 17.

Peak days at MBO were September 26, 29 and 30 and October 5, 17, 18 and 19. The greatest single day was October 17 when 588 birds were banded. Most of those birds were kinglets, creepers, Myrtle warblers, juncos and White-throated Sparrows.

Several special studies were undertaken at MBO including plumage studies of Myrtle Warblers and Baltimore Orioles and data was collected on the morph types of White-throated Sparrow head patterns.

## Nantucket, Mass. - Edith Andrews

Swainson's Thrushes occured in better numbers than last year: 22 banded this fall compared with only 4 in 1969: 5 Gray-cheeked thrushes

banded in 1970 as opposed to none in 1969. Yellowthroats were way down. Juncos and White-throated Sparrows were in poor numbers, in fact there were no good sparrow flights all fall.

AFR editor's note: Mrs. Andrews banded more or less regularly from August 3- October 31, however to show the possible effect of sporadic banding, October 17, a day when Mrs. Andrews was not running nets, saw 134 White-throated Sparrows banded at Manomet. It is this type of artifact that makes analyses of banding data extremely risky unless all the facts are known. Her total of 116 Redstarts is of interest when compared to the comments of Mrs. Patterson in Maine.

# Block Island, Rhode Island - Elise and Helen Lapham

We banded continuously from September 1- October 31 except for four days of bad weather...we skulled all of our birds and processed about 80% of them, releasing birds unweighed and unmeasured only when we had an adequate sample of a species in one day. We also released over 400 Myrtles unbanded.

The increase in numbers with fewer species is reflected in the fact that over half our birds were either Myrtle Warblers (1223), Catbirds (555), Red-eyed Vireos (376) or Swainson's thrushes (245), our four most common species in that order...in addition the following species more than doubled in number over our 3 years of banding: Flicker (two with red feathers suggestive of hybridization)\*, Yellowbellied and Least Flycatchers, Robins, Waxwings, Swamp Sparrows, Indigo Buntings and Catbirds. There were a few unusual species including our first Pigeon Hawk and a Western Tanager.

\*See paper on page 4 - evidently introgression is far more common than hybridization and care should be taken not to suggest hybridization without thorough investigation. Ed.

In the next issue, Atlantic Flyway Review will feature reports of Region II (Vermont, Inland New York and Northern Pennsylvania). See EBBA NEWS 33: 251 for details.

I thank Mr. Wayne R. Petersen for his excellent contribution to Atlantic Flyway Review. He can be reached c/o Manomet Bird Observatory, Manomet, Mass. 02345.